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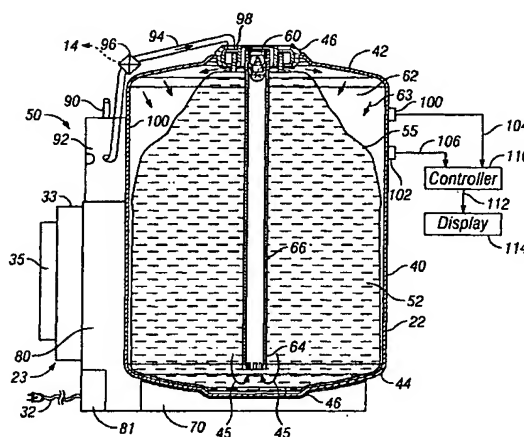
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(54) Title: BEER DISPENSING SYSTEM WITH GAS PRESSURE RESERVOIR



(57) Abstract: A home beer dispensing apparatus has a keg having a self-contained bag filled with a beer and a pressure system. The pressure system creates a pressurized air space between the keg inner walls and the bag to assist in the dispensing of the beer. The pressure system has a keg one-way air valve mounted to a top wall of the keg to permit entry of pressurized air into the keg. The pressure system has a pressure reservoir mounted in the dispensing apparatus outside the keg and in fluid flow communication with the keg one-way valve. The reservoir stores a charge of pressurized air and supplies at least a portion of this charge to the keg through the keg air valve when the dispensing apparatus is operated to dispense the beer. The reservoir provides a reserved charge of pressurized gas that is on hand to reduce dampening pressure fluctuations during beer dispensing which can result in beer frothing, especially during the early stages of beer dispensing when the air head space in the keg is small. Further, the apparatus may also have a pressure sensing system adapted to measure time rate of pressure change in the keg. The apparatus has a signaling device responsive to the time rate of pressure change in the keg to produce a signal related to volume of beer remaining in the bag. Preferably, the signal is displayed visually on the dispensing apparatus.

INTERNATIONAL SEARCH REPORT

International Application No

/IB 03/05399

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B67D1/04

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B67D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 097 899 A (AICELLO CHEMICAL CO) 9 May 2001 (2001-05-09) paragraph '0035!; figure 1	1
A	NL 8 502 184 A (LEER KONINKLIJKE EMBALLAGE) 2 March 1987 (1987-03-02) page 2, line 5 - line 23; figure 1	9
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A	NL 1 019 526 C (HEINEKEN TECH SERVICES) 29 January 2002 (2002-01-29) page 5, line 12 - line 29; figures 1a-1d	30
A	WO 95/20540 A (FABBRO ALBERTO ;FABBRO URBANO (IT)) 3 August 1995 (1995-08-03)	
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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"&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	GB 1 102 697 A (PORTER LANCASTRIAN LTD) 7 February 1968 (1968-02-07) -----	
A	GB 2 270 124 A (AG PATENTS LTD) 2 March 1994 (1994-03-02) -----	

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB 03/05399

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-14

A beverage dispenser

2. claims: 15-38

pressure sensing and signalling system

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
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